

"APPROVED FOR RELEASE: 09/01/2001

CIA-RDP86-00513R001859520004-7

ASSOCIATION: none

ADDITIONAL INFORMATION

ENCLOSURE

APPROVED FOR RELEASE: 09/01/2001

CIA-RDP86-00513R001859520004-7"

34548

S/659/61/007/000/037/044

D205/D303

18.12.10 also 2408

AUTHORS: Korneyev, V.L., and Vernidub, I.I.

TITLE: High temperature oxidation of dispersed aluminum

SOURCE: Akademiya nauk SSSR. Institut metallurgii. Issledovaniya po zharoprochnym splavam, v. 7, 1961, 309 - 316

TEXT: A detailed study of the interaction of standardized Al powders with oxygen at high temperature, concerned mainly with the second, diffusional, stage of the oxidation. 0.8 g Al powder was uniformly spread on a quartz plate of 45 x 20 x 9 mm dimensions and hermetically sealed under a 1 reinforced glass bell. After regulation of oxygen flow and pressure, the sample was ignited. An oscillograph recorded the amount of in- and outgoing oxygen, its pressure and temperature. From the recorded data, the consumption of O₂ at every instant could be computed. The oxidized residue was also chemically analyzed. In some instances, a Mg-Zr ignitor (10 % by weight of the Al sample) was used, spread in a thin strip on the edge of the Al sample. The burning process was

Card 1/2

X

S/659/61/007/000/037/044
D205/D303

High temperature oxidation of ...

recorded by a high speed CKC-1 (SKS-1) camera using a micro objective with a 3-fold magnification. The process of the high temperature oxidation of aluminum powders is accompanied by the melting and vaporization of the metal and subsequent reaction of the vapor mixture of oxygen and aluminum in the gas phase. If the heat transfer towards the liquid aluminum drop is insufficient, the chemical interaction of Al and O₂ assumes a pulsating character represented by a series of consecutive flashes of aluminum vapor periodically bursting into the reactor space across the cracks in the oxidized film which covers the drop. At sufficient heat transfer towards the liquid aluminum the drop surface is exposed due to the fracture of the oxidized film under the pressure of metallic vapors. Thus, the continuous evaporation of Al into the reactor space is promoted. At a small distance from the liquid metal surface, the vapors interact with the oxygen, the process proceeding continuously. The degree of reaction of the powders with oxygen is 37 - 56 %, rising to 81 - 99 % in the case of preheating of the reagents to 400°C. There are 5 figures.

Card 2/2

VERNIDUB, I.I.; ZHIKHAREV, A.S.; MEDALIYEV, Kh.Kh.; PRAVDUN, N.S.;
SULAKVELIDZE, G.K.; CHUMAKOVA, G.G.

Ice-making properties of lead iodide aerosols, obtained by burning
up the metal iodide compounds. Izv. AN SSSR. Ser. geofiz. no.8:
1278-1284 Ag '63. (MIRA 16:9)

1. Predstavleno chlenom redaktsionnoy kollegii Izvestiy AN SSSR,
Seriya geofizicheskaya, L.M.Levinym.
(Lead iodide) (Aerosols--Thermal properties)

L 17643-63
 DATE 1/1/63
 AFFTC/ASD/ESD-3/AFGC P1-4 RB/JD
 ACCESSION NO: A500000

AUTHOR: Vernidub, I. I.; Zhikharev, A. S.; Medaliyev, Kh. Kh.; Pravdun, N. S.;
 Sulakvelidze, G. K.; Chumakova, G. G.

TITLE: Ice-forming properties of lead iodide aerosols produced by combustion of
 metallo-iodide compounds

SOURCE: AN SSSR. Izv. Ser. geofizicheskaya, no. 8, 1963, 1278-1284

TOPIC TAGS: aerosol, ammonium iodide, lead iodide, fog, supercooled fog, aqueous
 fog, cloud chamber, ice crystal

ABSTRACT: The crystallizing effect of PbI_2 aerosols on a supercooled aqueous fog
 in a cloud chamber has been investigated. The aerosols were produced by the com-
 bustion of lead powder and iodine-containing substances (crystalline I, NH_4I , PbI_2 ,
 and $O=C_6L_4=O$). The quantity of ice crystals produced at a fog temperature of -100°
 is dependent on the material used and ranges from 2.3×10^{11} to 5×10^{12} crystals
 per gram. An aerosol produced from an NH_4I aerosol is as effective as a pure PbI_2
 aerosol obtained by the sublimation of lead iodide in an electric arc. The ice-
 forming capability of PbI_2 aerosols produced by the combustion of metallo-iodide

Card 1/2

L 17693-63

ACCESSION NR: AP5005590

materials increases with a temperature decrease of the aqueous fog. Aerosols of all the investigated metallo-iodide materials are highly monodispersive: between 53 and 71% of the particles are 0.05—0.15 μ in diameter. The predominant fraction of particles in an aerosol is dependent on the iodide-containing substance used. Orig. art. has: 2 figures, 2 tables, and 2 formulas.

ASSOCIATION: none

SUBMITTED: 18Dec61

DATE ACQ: 06Sep63

ENCL: 00

SUB CODE: AS

NO REF SOV: 002

OTHER: 003

Card 2/2

80101

S/080/60/033/04/12/045

5.2100B

AUTHORS:

Makolkin, I.A., Vernidub, I.I., Zhvanko, Yu.N., Karpov, V.T., Razumovskaya, G.S., Vol'khovskaya, A.A.

TITLE:

The Kinetics of Oxidation of Fine Magnesium Powders at Raised Temperatures

PERIODICAL:

Zhurnal prikladnoy khimii, 1960, Vol 33, Nr 4, pp 824 - 831

TEXT:

This is a continuation of the work in [Ref 11]. The kinetics of the oxidation of fine magnesium powders of the M-3 and M-4 type in an atmosphere of air, oxygen and nitrogen is investigated here. The oxidation was carried out in porcelain crucibles and drip pans which were placed into muffle furnaces. After heating the samples were subjected to roentgen-structural analysis. The temperature range for powders in an air atmosphere was 350 - 500°C, in oxygen 350 - 450°C and in nitrogen 400 - 500°C. It has been established that at temperatures of up to 450°C both powders interact with air, oxygen and nitrogen, the reactions being described by damping curves. This points to the fact that a film of magnesium oxides and nitrides has protective properties up to 450°C. Above this temperature the film loses its protective properties. M-4 powder is more reactive than M-3 powder, which is explained by the large specific surface of M-4 (3,500 cm²/g) compared to that of M-3 (616 cm²/g). This conclusion agrees with the values of the activation energies: these values for M-4 in air and

Card 1/2

80101

S/080/50/033/04/12/045

The Kinetics of Oxidation of Fine Magnesium Powders at Raised Temperatures

nitrogen are lower and in oxygen higher than for M-3. It has been established that in the case of heating powders at 500°C in the air MgO and Mg_3N_2 are formed simultaneously. In this case a white, a gray and a yellow layer are formed in the reaction products. The first layer consists mainly of MgO and partly of Mg_3N_2 , in the second and third layers more Mg_3N_2 and less MgO is contained, as well as an insignificant amount of $Mg(OH)_2$. The reaction product of both powders in nitrogen is Mg_3N_2 . Thanks are expressed to Ye.S. Makarov from the Institut analiticheskoy khimii AN SSSR (Institute of Analytical Chemistry of the AS USSR).

There are: 5 graphs, 5 tables and 11 references, 2 of which are Soviet, 4 English, 1 American, 1 Rumanian, 1 French, 1 German and 1 Japanese.

ASSOCIATION: Moskovskiy ordena Trudovogo Krasnogo Znameni institut narodnogo khoz-yaystva imeni G.V. Plekhanova (Moscow Institute of National Economy imeni G.V. Plekhanov, Bearer of the Order of Labor Red Banner).

SUBMITTED: July 2, 1959

Card 2/2

KORNEYEV, V.L.; VERNIDUB, I.I.

High temperature oxidation of dispersed aluminum. Issl. po
zharopr. splav. 7:309-316 '61. (MIRA 14:11)
(Aluminum--Corrosion) (Powder metallurgy)
(Metals at high temperature)

TRANSLATION: The ice-forming properties of a lead iodide aerosol obtained by volatilization of pure PbI_2 in air at various temperatures and pressures is a function of the volatilization temperature and the temperature of the medium to

٤٥٢٥

1 / 2

Dr. A. B. ...

At F... ..

8. $\frac{1}{2} \times \frac{1}{2} = \frac{1}{4}$ 9. $\frac{1}{2} \times \frac{1}{2} = \frac{1}{4}$ 10. $\frac{1}{2} \times \frac{1}{2} = \frac{1}{4}$

• • • • •

100

1. *Journal of the American Medical Association*, 1997; 277: 1033-1038.

ACCESSION NR: AR5008856

into the nose holes of the

SUB CODE: IC, ES

ENCL. 1A

1ST AND 2ND CROSS
100 AND 4TH CROSS

PROCESSES AND PROPERTIES INDEX

Morphology and properties of the base (Lachpore
 Anderson, A.) during the processes of annealing IV and V
 maturity stage. In: *Metallurgical Transactions*, Vol. 1, No. 1, 1968, p. 1-10. The transparent colonies
 become semi-transparent; small fat droplets appear and later

face (blue) of the crystal composition increases and blue-irradiated
 power (neutral-red) decreases as maturity is approached.
R. L. E.

ASS-ALA METALLURGICAL LITERATURE CLASSIFICATION

10000 11000 12000 13000 14000 15000 16000 17000 18000 19000 20000 21000 22000 23000 24000 25000 26000 27000 28000 29000 30000 31000 32000 33000 34000 35000 36000 37000 38000 39000 40000 41000 42000 43000 44000 45000 46000 47000 48000 49000 50000 51000 52000 53000 54000 55000 56000 57000 58000 59000 60000 61000 62000 63000 64000 65000 66000 67000 68000 69000 70000 71000 72000 73000 74000 75000 76000 77000 78000 79000 80000 81000 82000 83000 84000 85000 86000 87000 88000 89000 90000 91000 92000 93000 94000 95000 96000 97000 98000 99000

10000 11000 12000 13000 14000 15000 16000 17000 18000 19000 20000 21000 22000 23000 24000 25000 26000 27000 28000 29000 30000 31000 32000 33000 34000 35000 36000 37000 38000 39000 40000 41000 42000 43000 44000 45000 46000 47000 48000 49000 50000 51000 52000 53000 54000 55000 56000 57000 58000 59000 60000 61000 62000 63000 64000 65000 66000 67000 68000 69000 70000 71000 72000 73000 74000 75000 76000 77000 78000 79000 80000 81000 82000 83000 84000 85000 86000 87000 88000 89000 90000 91000 92000 93000 94000 95000 96000 97000 98000 99000

VERNIDUB, M. F.

MR., Ichthyology Chair, Leningrad State University, -1947-

"Specificity of the Action of Salt Solutions on the Developing Eggs of Fish, "
Dok. AN, 58, No. 2, 1947

VERNIDUB, M.F.

Sturgeons

Morphophysiological stages in the development of eggs and larvae of sturgeon and their significance for fish breeding. Uch. zap. Len. un. no. 142, 1951

9. Monthly List of Russian Accessions, Library of Congress, ¹⁹⁵²November ~~1958~~. Unclassified.

VERNIDUB, M.F.

Fishes

Effect of variable conditions of development of eggs and early larvae of fish on their physiological condition and viability. Uch. zap. Len. un. no. 142, 1951

9. Monthly List of Russian Accessions, Library of Congress, November ¹⁹⁵² ~~1953~~. Unclassified.

VERNIDUB, M.F.

Embryology - Fishes

Principal causes of the loss and decrease of the viability of eggs and larvae of salmon and whitefish at fish-breeding stations, and ways of eliminating them.

Uch. zap. Len. un., no 142, 1951.

9. Monthly List of Russian Accessions, Library of Congress, November ¹⁹⁵²~~1953~~, ¹⁹⁵²Unclassified.

1. VERNIDUB, M. F.
2. USSR (600)
4. Karyokinesis; Sturgeons
7. Causes of abnormal fission and abnormal development of sturgeons' eggs. Dokl. AN SSSR 83 No. 6, 1952. Leningradskiy Gosudarstvennyy Universitet im. A. A. Zhdanova. Recd. 25 Dec. 1951.
9. Monthly List of Russian Accessions. Library of Congress, September, 1952. Unclassified.

VERNIDUB, M.F.; SOLOVKINA, L.N.

Effect of the type of initial egg fission on the formation of sturgeon and sturgeon-like fishes' embryos. Dokl.AN SSSR 93 no.3:573-576 N '53.
(MLRA 6:11)

1. Leningradskiy gosudarstvennyy universitet im. A.A.Ihdanova. Predstavleno akademikom Ye.N.Pavlovskim. (Sturgeons) (Embryology--Fishes)

VERNIDUB, M.F.

Morphological and physiological changes in the lavaret *Coregonus lavaretus ludoga* Poljakow during its embryonal development.
Trudy Kar.fil. AN SSSR no.5:103-118 '56. (MLRA 10:7)

1. Leningradskiy gosudarstvennyy ordena Lenina universitet imeni
A.A. Zhdanova. (Whitefishes)

VERVIDUB, M.F.

Experimental foundation of methods for accelerating the embryonal
development in salmon and their importance to the biotechnis of
salmon raising. Vest.LGU 18 no.3:7-22 '63. (MIRA 16:2)
(SALMON) (EMBRYOLOGY--FISHES)

VERNIDUB, M.F.

Experimental analysis of processes induced by the poisoning of the
Baltic salmon by nonvolatile (tar) phenols during the larval period
of its life. Uch.zap.LGU no.311:153-177 '62. (MIRA 15:8)
(Phenols--Toxicology) (Salmon) (Plyussa River--Water--Pollution)

VERNIGOR, A.P.

22545 Vernigor, A.P. Novye Sorta Zernobobovykh Kul'tur Dlya Arm-
yanskoi SSR Izvestiya (Akad Nauk Arm. SSR), Biol. I S-kh Nauki I
II, 1949 S-147-54 Rezyume Na Arm Yaz.
SO: Letopis No.30, 1949

VERNIGOR, A.P.

22545 Vernigor, A.P. Novye sorta zernobobovykh kul'tur dlya armianskoi sssr izvestiya
(akad nauk arm. sssr), biol. i s-kh nauki T.II, No. 2, 1949 s-147-54 rezyume na arm yaz.

SO: LETOPIS' No. 30, 1949

VERNIGOR, P.

Preventing gas explosions in metallurgical plants. Metallurg 10
no.8:33 Ag '64. (MIRA 17:11)

VERNIGOR, P.

Safety in gas-operated plants. Metallurg 7 no.12:30-31 D '62.
(MIRA 15:12)

1. Nizhne-Tagil'skiy metallurgicheskii kombinat.
(Metallurgical plants—Safety measures)

VERNICOR, Pavel Ivanovich

[Safety measures in the gas handling and turning equipment of metallurgical plants] Tekhnika bezopasnosti v gazovom khoziaistve metallurgicheskikh zavodov. Moskva, Metallurgiya, 1966. 211 p. (MJRA 18:12)

VFRNIGOR, P.A., dotsent

Testing blast furnace structures for airtightness. Stal'
25 no.3:213 Mr '65. (MIRA 18:4)

VERNIGOR, P.I., inzh.

Explosiveness of mixed coke and blast-furnace gas. Stal' 25
no.2:186-187 F '65. (MIRA 18:3)

1. Nizhne-Tagil'skiy metallurgicheskiy kombinat.

VERNIGOR, P.I.

Cooling and purification of blast furnace gas in a packingless
scrubber. Stal' 23 no.6:570-571 Je '63. (MIRA 16:10)

BUKHMEN, Yakov Zakharovich; VERNIGOR, P.I., retsenzent; PODVYSOTSKIY, K.S., retsenzent; BAZHANOV, T.A., red.; SKOROBOGACHEVA, A.P., red. izd-va; MATLYUK, R.M., tekhn. red.

[Safety measures in the handling of gases] Gazospasatel'noe delo. Moskva, Metallurgizdat, 1963. 256 p. (MIRA 16:7)
(Gases—Safety measures)

VERNIGOR, P. I.

137-1958-3-4753

Translation from: Referativnyy zhurnal, Metallurgiya, 1958, Nr 3, p 41 (USSR)

AUTHOR: Vernigor, P. I.

TITLE: Operational Results of the Employment of Electric Filters DM-1 and DM-9 for the Purification of Blast Furnace Gases Generated During the Smelting of Ferrosilicon (Opyt po ochildke domennogo gaza v elektrofil'trakh DM-1 i DM-9 pri vyplavke ferrosilitsiya)

PERIODICAL: Sb. statey po energetike. Moscow, Metallurgizdat, 1957, pp 183-192

ABSTRACT: In the process of melting Fe-Si, the blast furnace gases contain a considerable amount of volatile silicic acid, which condenses in the form of an extremely fine powder when the temperature decreases, and which is only poorly retained in the scrubbers and electric filters (E). Operational results of the employment of E's of the DM-1, DM-7, DM-9, and DM-30 types under operational conditions of Fe-Si melting in a blast furnace of one of the plants are given. It is established that satisfactory results may be obtained with the E's under the following conditions: the velocity of gases must not exceed 0.53 m/sec (when the furnace operates under increased gas pressures, this velocity

Card 1/2

137-1958-3-4753

Operational Results of the Employment of Electric Filters (cont.)

may not exceed 0.7 m/sec), the consumption of water employed in spraying of the scrubbers and in the rinsing of the E's should amount to 6.8 m³ per 1000 m³ of gas, at an electrical energy consumption of 0.58 kw-hr per 1000 m³ of gas. The productivity of the E's may be increased by converting the blast furnaces to operation at higher gas pressures, employing an arrangement for continuous rinsing of the E's, and by increasing the velocity of gases in the scrubber checker to 4 m/sec.

Ye. V.

Card 2/2

VERNIGOR, Pavel Ivanovich; ROPOPORT, Il'ya Savel'yevich; USPENSKIY, V.A.,
red.; ROZHKO, L.P., red.; KEL'NIK, V.P., red.izd-vs; ZEF, Ye.M.,
tekhn.red.

[Machinist operating an electric gas purifier] Mashinist elektricheskoi gazoochistki. Sverdlovsk, Gos.nauchno-tekhn. izd-vo
lit-ry po chernoi i tsvetnoi metallurgii, Sverdlovskoe otd-nie,
1957. 228 p. (MIRA 11:3)
(Gas purification)

Vernigor, P.I.

AUTHOR: Vernigor, P.I.

130-12-5/24

TITLE: Blast-furnace Gas Cleaning When Smelting ferromanganese
(Ochistka domennogo gaza pri vyplavke ferromargantsa)

PERIODICAL: Metallurg, 1957, no.12, pp. 10 - 11 (USSR).

ABSTRACT: The author describes modifications in the gas-cleaning plant and practice made when an 1 130-m³ furnace was put on to ferromanganese smelting with a top pressure of 0.5 atm. gauge and a coke rate of 1.6 ton/ton alloy, the gas output being 3 400 m³ per ton of coke or 75-80 000 m³/hour. Because of the excellent results obtained, the current to the electrostatic precipitators was decreased to 20 A. The author gives data on gas cleaning obtained in the first ten days and the improvement in data relating to later stages of the 42-day campaign. The mean dust content in the clean gas for the last month was 0.43 mg/m³. He gives results of determinations of rates of dust-catching at different points in the plant.

ASSOCIATION: Nizhniy-Tagil Metallurgical Combine (Nizhne-Tagil'skiy metallurgicheskiy kombinat)

AVAILABLE: Library of Congress
Card 1/1

24(3)

PHASE I BOOK EXPLOITATION

SOV/2190

Vernigor, Pavel Ivanovich, and Il'ya Savel'yevich Rapoport

Mashinist elektricheskoy gazoochistki (Operator of an Electric Gas Purifier)
Sverdlovsk, Metallurgizdat, 1957. 228 p. Errata slip inserted. 3,500 copies
printed.

Eds.: V. A. Uspenskiy, and L. P. Rozhko; Ed. of Publishing House: V. P. Kel'nik;
Tech. Ed.: Ye. M. Zef.

PURPOSE: This book is intended to help train operators handling electric gas
purification equipment. It may also prove useful to foremen, crew heads, and
maintenance personnel charged with the care of gas equipment in metallurgical
enterprises.

COVERAGE: The book deals with the theoretical principles upon which electric
filters are based, the layout of filters, and their maintenance. Considerable
attention is devoted to the electrical equipment used for gas purification.
Principles of physics and electrical engineering are briefly discussed.
Characteristics of different types of electric filters used in ferrous

Card 1/7

Operator of an Electric (Cont.)

SOV/2190

metallurgy are described and instructions given on assembling, servicing, and preventing their most frequent failures. The author thanks engineers V. N. Uzhov, R. N. Voshchuk, M. S. Mironchik, V. A. Prilutskiy, and A. G. Lyakhov. There are 26 bibliographic references, all Soviet.

TABLE OF CONTENTS:

Foreword	3
Ch. 1. Basic Information on Physics and Electrical Engineering	5
Some properties of gases	5
Electric charge and field	7
Homogeneous and non-homogeneous field	9
Potential of electric field	9
Dielectrics	10
Direct current	11
Ohm's law for direct current circuit	11
Short circuit	12
Work and power of electric current	13

Card 2/7

Operator of an Electric (Cont.)

80V/2190

Magnetic field	14
Electromagnetic induction	16
Alternating current	17
Alternating current circuit	19
Three-phase current	20
Ch. 2. Elements of Theory of Electric Gas Purification	23
Gas purification process in an electric filter	23
Gas ionization and corona formation	23
Selection of the type of current and polarization	26
Charging, shifting, and settling of dust	28
Ch. 3. Fuel Gases and Their Purification	30
Blast furnace gas and its properties	30
Properties of blast furnace dust	32
Purification of blast furnace gas	38
Rough purification of blast furnace gas	39
Mild gas purification	41
Gas purification in battery cyclones	48

Card 3/7

Operator of an Electric (Cont.)

80V/2190

Purification of gas with the aid of a checking unit	49
Gas purification with the aid of pipe dispersant	51
Intensive purification of gas	53
Water supply for gas purification	56
Water supply for continuous washing of settling electrodes	57
Recovery and properties of coke gas	63
Purification of coke gas	65
Water supply in coke gas purification	68
Recovery and properties of generator gas	69
Purification of generator gas	70
Scrubbers and water supply	72
Utilization of fuel gases in industry	73

Ch. 4. Layout and Assembling of Electric Filters	75
Principal parts of electric filters	75
Body of electric filter	77
Settling system	77
Corona system	83
Chokes	91
Disconnecting devices	94

Card 4/7

Operator of an Electric (Cont.)

POV/2190

Sectional plate disconnecter	96
Thermal plate disconnecter	97
Debal'tsevo plate disconnecter	98
Continuous washing equipment for settling electrodes	99
Layout of intermittent washing system	101
Hydraulic shutters	102
Layout of type S electric filters	104
Type SU electric filters	106
Technical data on electric filters	108
Electric filter assembling procedure	108
Assembling the external part of an electric filter	116
Assembling communication lines and electrodes in the electric filter	117
Testing an electric filter after it has been mounted	118
Ch. 5 Electric Equipment of Electric Filters	123
General information	
Designation and operational principle of amplifying-rectifying equipment	
Transformers	125
Electric motors	131

Card 5/7

Operator of an Electric (Cont.)

80V/2190

Mechanical rectifier. Rectifying a current	131
Choke coils	135
Indicator of current direction	136
Automatic transformers	137
Protective resistance (rheostat)	142
Starting equipment	143
Relay of protection and control	148
Discharger	151
Dry rectifiers	151
Graphic symbols for electrical schematics	152
Schematic for the TU-200 (TU-335) equipment	154
Schematic for the AF-18 equipment	156
Schematic for the AFA-90-200 equipment	159
Amplifying-rectifying sub-station	168
Control circuit of automatic washing of fields	173
Ch. 6. Servicing Electric Filters	177
General information	177
Maintenance of operating electric filters	178
Regulating gas and electric loads	180
Control of the water run-down through gates of a water bin	181

Card 6/7

Operator of an Electric (Cont.)

807/2190

Regulating gas temperatures	181
Cleaning and regulating continuous washing settling electrodes	182
Intermittent washing of settling fields	184
Operation of electrical equipment	185
Maintenance of gas disconnectors and their driving units	188
Maintenance of ventilating equipment	189
Stoppages of electric filters	190
Disconnecting an electric filter for overhauling	190
Cleaning settling and corona electrodes	195
Tightening and centering corona electrodes	195
Overhaul of a mechanical rectifier	196
Overhaul of chokes and their driving units	197
Testing electric filter after it has been overhauled	199
Acceptance of an overhauled electric filter	201
Preparing the electric filter for starting	201
Starting an electric filter	203
Major failures of electric filter equipment and their prevention	204
Problems of safety technique in servicing gas purification equipment	219

Bibliography

225

AVAILABLE: Library of Congress (TN718.V4)

TM/mal

Card 7/7

9-23-59

VERNIGOR, P.I.

Combustible and explosive properties of coke gas. Izv. vys.
ucheb. zav.; chern. met. 7 no.9:24-28 '64. (MIRA 17:6)

1. Nizhne-Tagil'skiy metallurgicheskiy kombinat.

VERNIGOR, P.I., inzh.

Properties of flue dust and its precipitation in gas purification
apparatuses. Stal' 20 no. 7:664-665 J1 '60. (MIRA 14:5)

1. Nizhne-Tagil'skiy metallurgicheskiy kombinat.
(Gases—Purification) (Fly ash)

VERNIGOR, Pavel Ivanovich; KABELYANSKIY, G.V., redaktor; SIDOROV, V.N.,
redaktor; VAYNSHTEYN, Ye.B., tekhnicheskiy redaktor

[Making gas equipment safe in metallurgical plants] Organizatsiya
bezopasnykh rabot v gazovom khoziaistve metallurgicheskikh zavodov.
Moskva, Gos. nauchno-tekhn. izd-vo lit-ry po chernoi i tsvetnoi
metallurgii, 1954. 143 p. (MLRA 8:3)
(Metallurgical plants--Safety measures)
(Gas manufacture and works--Safety measures)

VERNIGOR, V., kand. sel'khoz. nauk; BERESHCHUK, N., red.; NAGIBIN, P.,
tekh. red.

[If there are feeds there will be meat] Budut korma -
budet miaso. Alma-Ata, Kazsel'khozgiz, 1962. 26 nos. in 1 v.
14 p. (MIRA 17:1)

KARPOV, M.S.; VERNIGOR, V.A.; BAT'KAYEV, R.Ya.; POPENKO, A.K.; IL'INA, K.A.;
IMRANOV, N.S.; PERSHINA, E.P.

Microbiological processes in surface silage. Trudy Inst.mikrobiol.
i virus.AN Kazkah.SSR 6:133-140 '62. (MIRA 15:8)
(ENSILAGE--MICROBIOLOGY)

CHERNETSKIY, V.D., inzh.; YASHEK, I.N., inzh.; VERNIGORA, B.I., inzh.

Production of gears of magnesium cast iron. Mashinostroyeniye
no.1:65-66 Ja-F '64. (MIRA 17:7)

SALYUKOV, P.A., kand. biol. nauk; VERNIGOR, V.A., kand. sel'khoz. nauk; KORMANOVSKAYA, M.A., kand. sel'khoz. nauk; GOLODNOV, A.V.; SKOROBOGATOV, Yu.A., mladshiy nauchnyy sotr.; MALLITSKIY, V.A., kand. sel'khoz. nauk; CHASHCHIN, B.V., kand. sel'khoz. nauk; PONOMAREV, P.P., kand. tekhn. nauk; BARMINTSEV, Yu.N., doktor sel'khoz. nauk; NECHAYEV, I.N., mlad. nauchnyy sotr.; POZDNYAKOV, P.M., kand. biol. nauk; KOVIN'KO, D.A., kand. biol. nauk; BALANINA, O.V., kand. sel'khoz. nauk; MOISEYEV, K.V., kand. sel'khoz. nauk; ROMANOV, P.F., kand. veter. nauk; PAL'GOV, A.A., kand. veter. nauk; ANAN'YEV, P.K., kand. veter. nauk; VASIL'YEV, B.M., kand. sel'khoz. nauk; ABDULLIN, V.A., kand. ekon. nauk; GALIAKBEROV, N., laureat Gos.premii, kand. sel'khoz. nauk, red.; GUSEVA, N., med.; NAGIBIN, P., tekhn. red.

[Reference book for zootechnicians] Spravochnik zootekhnika.
Pod red. N.Galiakberova. Alma-Ata, Kazsel'khozgiz, 1963.
492 p. (MIRA 16:5)

(Kazakhstan--Stock and stockbreeding)

VERNIGOR, V. A.

VERNIGOR, V. A. -- "Experience in Preparing Combined Silage and Feeding It to Pigs." Min Higher Education USSR. Alma-Ata Zooveterinary Inst. Alma-Ata, 1955.
(Dissertation for the Degree of Candidate in Agricultural Sciences).

SC: Knizhnaya Letopis', No 9, 1956

KRUK, Z.V. (Kiyev, ul. Gor'kogo, d.39, kv. 18); PUTILOVA, A.A.;
VERNIGORA, I.P.; SAPSAY, Ye.I.; SHARGORODSKIY, V.S.

Data on orthopedic traumatic diseases in the rural population
of Transcarpathian Province. Ortop., travm. i protez. 24 no.12:
48-52 D '63. (MIRA 17:7)

1. Iz Ukrainського instituta ortopedii i travmatologii v Kiyevе
(direktor-dotsent I.P. Alekseyenko, nauchnyy rukovoditel' -
chlen-korrespondent AMN SSSR prof. F.R. Bogdanov).

VERNIGORA, M.I. [Vernyhora, M.I.], geroy Sotsialisticheskogo Truda,
mashinist

Our experience with flax processing units. Mekh. sil'., hosp. 9
no.10:18-19 0 '58. (MIRA 11:10)

1. Naroditskaya remontno-traktornaya stantsiya, Zhitomirekoy
oblasti.

(Flax)

~~VERNIGORA, M.I.~~
VERNIGORA, M.I. [Vernyhora, M.I.], mashinist 1'nopererobnogo agregatu.

Give more flax to the country. Mekh. sil'. hosp. 9 no.1:15 Ja '58.
(MIRA 11:2)

1. Narodits'ka mashinno-traktorna stantsiya, Zhitomirs'koi oblasti.
(Flax)

VERNIK, Aleksandr Borisovich; BURMISTROV, P.I., kandidat tekhnicheskikh nauk, retsenzent; BOGUSLAVSKIY, P.Ye., kandidat tekhnicheskikh nauk, retsenzent; MEKLER, A.G., kandidat tekhnicheskikh nauk, retsenzent; NIKOLAYEVSKIY, G.M., kandidat tekhnicheskikh nauk, retsenzent; SHESAREV, G.A., kandidat tekhnicheskikh nauk, retsenzent; FINKEL'-SHTEYN, B.Ya., kandidat tekhnicheskikh nauk, retsenzent; KAZAK, S.A., kandidat tekhnicheskikh nauk, redaktor; POPICHENKO, M.N., inzhener, redaktor; DUGINA, N.A., tekhnicheskii redaktor;

[Bridge cranes of great lifting power; design, calculation, and installation] Mostovye krany bol'shoi gruzopod'emnosti; konstruirovaniye, raschet i izgotovleniye. Moskva, Gos. nauchno-tekhn. izd-vo mashinostroit. lit-ry, 1956. (MLRA 10:2)

(Cranes, derricks, etc.)

VERNIK, A.B. Laureat Leninskoy i Gosudarstvennoy premiy; KAZAKEVICH,
T.I., kand. tekhn. nauk

The main thing is reliability and durability. Mashinostroitel'
no.9:4-6 S '65. (MIPA 18:12)

1. Glavnyy inzhener Elektrostal'skogo zavoda tyazhelogo mashino-
stroyeniya (for Vernik).

AUTHOR: Vernik, A.B., Engineer.

122-1-21/34

TITLE: Improvements in the organisation of design and development work (Uluchshat' organizatsiyu proyektokonstruktoriskikh rabot).

PERIODICAL: "Vestnik Mashinostroyeniya" (Engineering Journal), 1957, No.1, pp. 72 - 75 (U.S.S.R.)

ABSTRACT: Opinions of a heavy machinery designer in response to the Editor's invitation. The present duplication of effort is illustrated, e.g. by the existence of eight design offices engaged on crane projects. An organisation is advocated with one group of project design offices divided by projects and another group of product design offices, each office specialised on a product with some general application. Particular attention is demanded to improved specifications of project data. A unified drawing system without local variations is advocated. The design office should issue only tracings, leaving reproduction and other documentation procedure to the planning departments. Unified standards should be applied. Experimental facilities for heavy engineering development are necessary. A central laboratory for testing new machines is advocated. A clear division of responsibilities between project offices and research institutes is necessary.

Card 1/1

AVAILABLE: Library of Congress

AZARENKO, B.S., kand. tekhn. nauk; AFANAS'YEV, V.D., kand. tekhn. nauk;
 BROVMAN, M.Ya., inzh.; VAVILOV, M.P., inzh.; ~~VERNIK, A.B., inzh.~~;
 GOLUBKOV, K.A.; GUBKIN, S.I., akademik [deceased]; GUREVICH, A.Ye.,
 inzh.; DAVYDOV, V.I., kand. tekhn. nauk; DROZD, V.G., inzh.;
 YERMOLAYEV, N.F., inzh.; ZHUKEVICH-STOSHA, Ye.A., inzh.; KIRILIN,
 N.M., kand. tekhn. nauk; KOVYNEV, M.V., inzh.; KOGOS, A.M., inzh.;
 KOROLEV, A.A., prof.; KUGAYENKO, M.Ye., inzh.; LASKIN, A.V., inzh.;
 LEVITANSKIY, B.A., inzh.; LUGOVSKIY, V.M., inzh.; MEYEROVICH, I.M.,
 kand. tekhn. nauk; OVCHAROV, M.S., inzh.; PASTERNAK, V.I., inzh.;
 PERLIN, I.L., doktor tekhn. nauk; POBEDIN, I.S., kand. tekhn. nauk;
 ROKOTYAN, Ye.S., doktor tekhn. nauk; SAF'YAN, M.M., kand. tekhn.
 nauk; SMIRNOV, V.V., kand. tekhn. nauk; SMIRNOV, V.S.; SOKOLOVSKIY,
 O.P., inzh.; SOLOV'YEV, O.P., inzh.; SIDORKEVICH, M.A., inzh.;
 TRET'YAKOV, Ye.M., inzh.; TRISHEVSKIY, I.S., kand. tekhn. nauk;
 KHENKIN, G.N., inzh.; TSELIKOV, A.I.; GOROBINCHENKO, V.M., red.
 izd-va; GOLUBCHIK, R.M., red. izd-va; RYMOV, V.A., red. izd-va;
 DOBUZHINSKAYA, L.V., tekhn. red.

[Rolling; a handbook] Prokatnoe proizvodstvo; spravochnik. Pod
 red. E.S.Rokotiana. Moskva, Metallurgizdat. Vol.1. 1962. 743 p.
 (MIRA 15:4)

1. Akademiya nauk BSSR (for Gubkin). 2. Chlen-korrespondent Akademii
 nauk SSSR (for Smirnov, Tselikov).
 (Rolling (Metalwor))—Handbooks, manuals, etc.)

VERNIK, A.B., laureat Stalinskoy premii.

Reducing the weight of bridge cranes with a large hoisting capacity. Standartizatsiia no.4:37-48 JI-Ag '54. (MLRA 8:2)

1. Glavnyy konstruktor Sibirskogo zavoda tyazhelogo mashinostroyeniya.
(Cranes, derricks, etc.)

CHAYKOVSKIY, K.A., inzhener; VERNIK, A.B., inzhener.

Devices for hoisting in installing hydroelectric power station
equipment. Mekh.trud.rab.10 no.4:28-29 Ap '56. (MLRA 9:7)
(Hoisting machinery)

Vernik, A. B.

USSR/Engineering - Bridge cranes

Card 1/1 Pub. 128 - 2/33

Authors : Vernik, A. B., and Zotov, F. S.

Title : A separate drive for travelling wheels of the heavy load capacity bridge cranes

Periodical : Vest. mash. 36/1, 7-12, Jan 1956

Abstract : Operational tests were conducted by the All-Union Scientific Research Institute of Hoisting and Conveying Machinery Building, to determine the efficiency and reliability of application of separate drives for travelling wheels of bridge cranes. Results of these tests on various types of cranes, including those with separate drives, are given. Diagrams, photographs, illustrations, drawings, tables.

Institution :

Submitted :

VERNIK, A.B., laureat Stalinskoy premii, inzhener; ZOTOV, F.S.

Separate drives for the running wheels of large load capacity
bridge cranes. Vest.mash. 36 no.1:7-12 Ja '56. (MLRA (;3)
(Cranes, derricks, etc.)

9/133/60/000/009/009/015
A054/A029

AUTHOR: Vernik, A.B., Engineer

TITLE: On the Method of Producing Thin-Walled Large-Diameter Tubes 7/0

PERIODICAL: Stal', 1960, No. 9, pp. 828-830

TEXT: The technical and economical aspects of tube manufacture by electric welding and by rolling are described. Tubes with a diameter of over 600 mm are produced at present from thin sheets by electric welding. However, in spite of the most up-to-date equipment and technology, the production costs of large-diameter electro-welded tubes are much higher than those of tubes rolled by the conventional method, even with machinery and technology dating from 30 years ago. The costs of 1 m of electro-welded tubes of 720 mm in diameter are 193 rubles as compared to a cost price of 78 rubles for 1 m of seamless tube of 550 mm in diameter. This great difference in price is in the first place due to the high sheet prices. Even in the USA, where the sheet prices are the lowest in the world, the production costs of welded tubes are much higher than for tubes made on rolling stands. Based on statistical data and while taking into consideration the facts mentioned above, the author suggests that it would be more economical to develop the technology of tube rolling and to make it suitable.

Card 1/3

S/133/60/C00/009/009/015
A054/A029

On the Method of Producing Thin-Walled Large-Diameter Tubes


able for the production of seamless tubes of 820-1,020 mm in diameter, with wall-thicknesses of 8-9 and 10-11 mm, than to develop the welding method which cannot compete with rolling even when sheet prices are lower. At the Elektrostal'skiy zavod tyazhelogo mashinostroyeniya (Elektrostal' Plant of Heavy Machinery) in cooperation with the Ukr NITI (Ukrainian Scientific Research Institute of Tubes), the Novosibirskiy zavod tyazhelykh stankov i gidravlicheskikh pressov (Novosibirsk Plant of Heavy Machine Tools and Presses), the Kramatorskiy zavod tyazhelykh stankov (Kramatorsk Plant of Heavy Machine Tools) and other factories, tests were carried out in order to establish a technology for the production of large-diameter thin-walled tubes by rolling. The main problem was how to obtain tube blanks with the thinnest possible walls. The equipment of the new technology includes an annular furnace, a broaching press, elongating machinery for the elongation of the tube blanks with a coefficient of 2.75, while at the same time decreasing their wall-thickness. On the pilger mill, forming a link in this process, tube blanks up to 700 mm diameter with wall-thicknesses of up to 13.5 mm will be produced which are next subjected to extension; tubes with diameters of up to 820 mm and wall-thickness of 8 mm are to be produced on three-roll expanding mills, which are designed in such a way that they form a unit with

Card 2/3

S/133/60/000/009/009/015
A054/A029

On the Method of Producing Thin-Walled Large-Diameter Tubes

the elongation machine. The technology planned for several other tube types (with diameters between 325 and 820 mm, made of blocks of 485-950 mm diameter), furthermore comparisons between the technical-economical indices of welded and seamless tubes, between the parameters of the machinery used in producing these two types of tubes, production costs for seamless tubes (produced on pilger mills), welded and seamless tubes (produced on automatic machines) in Western-Europe and the USA are given. There are 2 tables and 1 Soviet reference.



Card 3/3

VERNIK, A.B., inzhener.

Crane trolleys with a reduced number of pulley-block branches.

Vest. mash. 36 no.9:3-11 8 '56.

(MLRA 9:10)

(Pulleys) (Cranes, derricks, etc.)

VERNIK, A.B., inzh.

Reorganization of pipe mills. Stal' 22 no.7:633 JI '62.

(MIRA 15:7)

1. Elektrostal'skiy zavod tyazhelogo mashinostroyeniya.
(Pipe mills)

RAUDAM, E.I.; LUKA, V.Ya.; PAYMRE, R.I. [Paimre, R.]; KHEYNSOO, E.K.
[Heiusoo, E.]; VERNIK, A.Ya.

Diagnosis of intervertebral disk protrusion. Zhur. nevrol. i psikh.
60 no.10:1259-1267 '60. (MIRA 14:1)

1. Kafedra nevrologii Tartuskogo gosudarstvennogo universiteta i
Tartuskaya respublikanskaya klinicheskaya bol'nitsa.
(INTERVERTEBRAL DISK---DISLOCATION)

GRODINSKIY, F.; KIIL, A.; Korp, A.; LINNAKIVI, J.; TILK, E.; VERNIK, L.;
REHEMAA, H., red.; VEEER, H., tekhn. red.

Parnu. Tallinn, Eesti Riiklik Kirjastus, 1962. 7 p.
(MIRA 16:3)

(Parnu--Views)

VANKER, Kh.; [Vanker, H.]; VEYNPALU, E.[Veinpalu, E.]; VERNIK, L.
ZINICHENKO, A., red.

[Health resorts of the Estonian S.S.R.] Kurorty Estonskoi
SSR. Tallinn, Eesti Raamat, 1964. 166 p. (MIRA 18:4)

VERNIK, R.S.; GRANITOV, I.I.

Some data on the effect of grazing on the composition and
productivity of ephemeral pastures. Nauch. trudy TashGU
no.241. Biol. nauki no.44:129-132 '64.

(MIRA 18:7)

VERNIK, R.S.

Influence of ecological factors on the natural reproduction of walnut
in the forests of Bostandykskiy District. Uzb. biol. zhur. no.2:
23-29 '61. (MIRA 14:5)

1. Institut botaniki AN UzSSR.
(BOSTANDYKSKIY DISTRICT--WALNUT)

VERNIK, R.S.

Ecological conditions of the growth of nut and fruit tree forests
in Bostandykskiy District, Uzbekistan. Bot. zhur. 46 no. 12:1736-
1773 D 1961. (MIRA 15:1)

1. Institut botaniki AN Uzbekskoy SSR.
(Bostandykskiy District--Nuts)
(Bostandykskiy District--Fruit trees)

VERNIK, R.S.; MAYLUN, Z.A.; KOMOTOV, I.F.; GRANITOV, I.I.,
doktor bial. nauk, prof., otv. rea.; MOSHCENKO, Z.V.,
red.

[Vegetation of the lower part of the Amu Darya River
and its efficient use] Rastitel'nost' nizov'ev Amu-
Dar'i i puti ee ratsional'nogo ispol'zovaniia. Tashkent,
Izd-vo "Nauka" Uzbekskoi SSR, 1964. 210 p.

(MIRA 18:1)

AKULOV, V.V., kand.geogr.nauk; BABUSHKIN, I.N., doktor geogr.nauk;
 ORESHINA, I.M.; SKVORTSOV, Yu.A., doktor geol.-mineral.nauk;
 PETROV, N.P., kand.geol.-mineral.nauk; CHERNEVSKIY, N.N.;
 KRYLOV, M.M., doktor geol.-mineral.nauk; KHASANOV, A.S.;
 BEDER, B.A., kand.geol.-mineral.nauk; KIMBERG, H.V., kand.
 sel'skokhoz.nauk; SUCHKOV, S.P.; GLAGOLEVA, A.F.; PERVU-
 SHINA-GROSHEVA, A.N.; VERNIK, R.S., kand.biol.nauk; MOMOTOV,
 I.P.; GRANITOV, I.I., kand.biol.nauk; SALIKHBAYEV, Kh.S., kand.
 biolog.nauk; STEPANOVA, N.A., kand.biolog.nauk; YAKHONTOV, V.V.;
 DAVLETSHINA, A.G., kand.biolog.nauk; MURATBEKOV, Ye.M., kand.
 biolog.nauk [deceased]; KUKLINA, T.Ye.; KORZHENEVSKIY, N.L., red.
 [deceased]; GORBUNOV, B.V., kand.geologo-mineral.nauk, red.;
 DONSKOY, P.V., red.; YAKOVENKO, Ye.P., red.izd-va; GOE'KOVAIA,
 Z.P., tekhn.red.

[Materials on the productive forces of Uzbekistan] Materialy po
 proizvoditel'nyy silam Uzbekistana. Tashkent. No.10. [Natural
 conditions and resources of the lower reaches of Amu-Darya;
 Kara-Kalpak A.S.S.R. and Khorezm Province of the Uzbek S.S.R.]
 Prirodnye usloviya i resursy nizov'ev Amu-Dar'i; Kara-Kalpakskaya
 ASSR i Khorazmskaya oblast' UzSSR. 1959. 351 p. (MIRA 13:5)

1. Akademiya nauk Uzbekskoy SSR, Tashkent. Sovet po izucheniyu
 proizvoditel'nykh sil. 2. Chleny-korrespondenty AN UzSSR (for
 Yakhontov, Korzhenevskiy).
 (Amu-Darya Valley--Physical geography)

VERNIK, R.S.

Principles of the geobotanical regionalization of Uzbekistan.
Trudy TashGU no.186:30-39 '61. (MIRA 14:12)

1. Akademiya nauk UzSSR.
(Uzbekistan--Phytogeography)

VERNIK, R.S.

Ephemeral vegetation in the piedmont regions of Kelesskiy District.
Trudy Inst.bot.AN Uz.SSR. no.3:5-46 '55. (MLRA 10:1)
(Kelesskiy District--Pastures and meadows)

VERNIK, R.S.; KAMALOV, Sh.

Nut forests of the Kaynarsay area of Bostandyk District. Uzb.
biol.zhur. no.1:20-26 '60. (MIRA 13:6)

1. Institut botaniki AN UzSSR.
(BOSTANDYK DISTRICT--NUT TREES)

VERNIK, R.S.; TALIPOV, K.

Transpiration of the English walnut under the arid conditions
prevailing in Bostandyk. Uzb. biol. zhur. 8 no.1:53-58 1964.

(MIRA 17:10)

1. Institut botaniki AN UzSSR.

VERNOV, S. I.

JANOSY, L.

21(1) PHASE I BOOK EXPLOITATION HUN/1911
International Conference on Cosmic Radiation. Budapest, 1956.
International Conference on Cosmic Radiation Organized by the
Hungarian Academy of Sciences. Budapest, 1957. 187 p.
200 copies printed.

Sponsoring Agency: Magyar Tudományos Akademia

Eds.: E. Fenyves, and A. Somogyi

PURPOSE: This report is intended for geophysicists concerned with
cosmic radiation.

COVERAGE: This report contains the abstracts of the papers read at
the conference. Some of the problems dealt with include nuclear
emulsions, extensive air showers and the progress of cosmic
ray measurements planned for the International Geophysical
Year. Most of the reports are followed by references. Soviet
scientists in the field of cosmic radiation who attended the
conference are: E.I. Andronikashvili, M.A. Dobrotin, I.I.
Gurevich, S.I. Nikol'skiy and S.N. Vernov. The articles are
written in English, German and Russian without parallel trans-
lations.

Card 1/6

International Conference (Cont.)

HUN/1911

3. Nikol'skiy, S.I. The Study of Nuclear Active Components of
Extensive Atmospheric Showers of Cosmic Rays 50
4. Fenyves, E. and Zitaapin, G.T. Height Dependence and the
Spectrum of the Core of Extensive Atmospheric Showers (not incl.)
5. Gurevich, A.Ye. Cherenkov Radiation of Extensive Atmos-
pheric Showers of Cosmic Rays 57
6. Andronikashvili, E.I., and M.P. Mikhlin. The Study of
the Spatial Dispersion of Penetrating Particles of Ex-
tensive Atmospheric Showers 63

THIRD SESSION

EXTENSIVE AIR SHOWERS

1. Babetti, J.L., Pukietter, and J.M. Masarik. The Transi-
tion Curve of the Extensive Photon Component of Extensive Air
Showers in Lead Absorbers of Thicknesses Between 0 and 25 cm. 73
2. Janosy, L., Z. Bakor, and A. Somogyi. Investigation of
Extensive Air Showers 230 m. Above Sea Level 96

Card 1/6

VERNOV, S. I.

JANOSY, L.

21(1)

FRASE I BOOK EXHIBITION

8/11/1911

International Conference on Cosmic Radiation. Budapest, 1956.
International Conference on Cosmic Radiation Organized by the
Hungarian Academy of Sciences. Budapest, 1957. 187 p.
200 copies printed.

Sponsoring Agency: Magyar Tudományos Akademia

Ms.: L. Janosy, and A. Komor

FURTHER: This report is intended for geophysicists concerned with
cosmic radiation.

COMMENTS: This report contains the six plenary sessions of the
conference. Some of the problems dealt with include nuclear
radiations, extensive air showers and the program of cosmic
ray measurements planned for the International Geophysical
Year. Most of the reports are followed by references. Soviet
scientists in the field of cosmic radiation who attended the
conference are: A. A. Abrikosov, A. I. A. Dobrotin, I. I.
Gurevich, S. I. Nikolsky and S. I. Vernov. The articles are
written in English, German and Russian without parallel trans-
lations.
Card 1/6

SIXTH SESSION

NUCLEAR COLLISIONS AT MODERATE ENERGIES

1. Vernov, S. I. The Interaction of Neutrons With Nuclei (not incl.)
of 10⁻¹⁰ to 10⁻¹¹ e.v. in the presence of a magnetic field. On a Possible Model
2. Friedlander, L. K. Cosmic-ray showers in the atmosphere. On a Possible Model
for the Neutron Cascade in Air at Moderate Energies 185

3. Janosy, L. E. Penetration of Cosmic Rays in the Atmosphere. On the Penetrating
Non-Ionizing Component of Cosmic Rays 187

NOTES: Library of Congress (Q85.185 1956)

ms/lab
6-22-55

Card 6/6

L 02219-67

ACC NR: AR6013698

SOURCE CODE: UR/0058/65/000/010/H051/H051

AUTHOR: Vernik, S. M.

TITLE: Concerning one modification of a method of determining the intrinsic attenuation of a cable by measuring the input impedance

SOURCE: Ref. zh. Fizika, Abs. 102a349

REF. SOURCE: Tr. Uchebn. in-tov svazi, vyp. 25, 1965, 211-216

TOPIC TAGS: rf cable, waveguide loss, electric impedance, resistance bridge, electric measurement, error

ABSTRACT: A method is proposed for extending the range of attenuation measurement towards slower values, whereby this range can be increased by approximately one order of magnitude while retaining the same measurement accuracy. The dependence of the measurement error on the bridge error is determined. [Translation of abstract]

SUB CODE: 09

Card 1/1 LC

VERNIK, S. M.; KURBATOV, N. D.

Methodology for the selection of pairs for high-frequency con-
solidation of municipal telephone cables. Elektrosviaz' 15
no. 11:48-52 N '61. (MIRA 14:11)
(Telephone lines)

VERNIK, S.M., kand.tekhn.nauk; MALKIN, Kh.R., kand.tekhn.nauk

Method for calculating the thermal conditions in large cables
carrying radio frequency in repeating transitory operation.

Vest.elektroprom. 32 no.8:48-51 Ag '61.
(Coaxial cables) (Radio lines)

(MIRA 14:8)

SOV/110-59-9-12/22

AUTHORS: Gurevich, A.S. and Vernik, S.M.
(Candidates of Technical Sciences)

TITLE: Improvements in the Construction of Symmetrical High-Frequency Cables with paper-"string" Insulation

PERIODICAL: Vestnik elektropromyshlennosti, 1959, Nr 9, pp 43-45 (USSR)

ABSTRACT: In order to increase the number of channels transmitted by cables with paper-"string" insulation it is required to extend the frequency band-width from 108 to 252 kc/s. It is, therefore, necessary to reduce the interference between circuits within the desired frequency range. Mutual interference between circuits may result either from variations occurring in manufacture or from cable design factors. The construction of quad cables may be improved by reducing the winding pitch of the "string" or by winding the "string" and the plain paper with opposite lays in the pairs on the quad. The mechanical stability of cables has been improved by reducing the "string" pitch from 7 mm to 5 mm; further reduction only increased the capacitance. Graphs showing the influence of different types of cable construction on inter-circuit capacitance and asymmetry of capacitance are plotted in

Card 1/3

SOV/110-59-9-12/22

Improvements in the Construction of Symmetrical High-frequency
Cables with Paper-"string" Insulation

Fig 1. It will be seen that considerable improvement can be achieved by use of the two methods mentioned. The length of pitch of twisting of quads determines the amount of interference between circuits of the quad due to the lead sheath. The charges and currents induced in the sheath can have a considerable effect, approximating to that of imaginary conductors of particular size and position outside the cable. Calculation of the influence of this 'third' circuit is discussed. Its influence can be reduced by reducing the pitch of twisting of the quad. However, this is only possible within limits, and a number of cables were made up of the same construction but different pitches of twisting in order to find the best values. Tabulated results show that the least pitch of twisting for cables with "string" insulation should be about 150 mm. Tests established that altering the pitch of twisting of the quad considerably improved the cable characteristics and Fig 2 shows a graph of inter-circuit capacitance and capacitance asymmetry as function of quad twisting pitch. It was also found that the influence of

Card
2/3

SOV/110-59-9-12/22

Improvements in the Construction of Symmetrical High-frequency
Cables with Paper-"string" Insulation

the 'third' circuit may be reduced by systematically crossing the conductors of a pair within the quads in the junction boxes when the line is made. A curve in Fig 3 shows how different methods of making connection in the junction boxes affect the characteristics of a particular cable.

There are 3 figures, 1 table and 2 Soviet references.

Card 3/3

VERNIK, V.S., inzh.

Automatic welding of the upper girder of the truss of a 63-ton
carrying capacity gondola car made of bent sections. Svar. proizv.
no.8:31-32 Ag '65. (MIRA 18:8)

1. Ural'skiy vagonostroitel'nyy zavod.

VERNIK, V. S., inzh.; GEYNRKHSODRF, N. G., inzh.

Reconditioning chromium bronze electrodes for resistance
welding machines by build-up arc welding. Svar. proizv. no.10:
32-33 0 '62. (MIRA 15:10)

1. Ural'skiy vagonostroitel'nyy zavod.

(Electrodes—Maintenance and repair)
(Bronze—Welding)

VERNIK, V.S.

Differential diagnosis of traumatic retroperitoneal hematomas.
Vest.khir. no.9:108-112 '61. (MIRA 15:3)

1. Iz gosital'noy khirurgicheskoy kliniki (zav. - prof. M.A.
Kholimskiy) Khabarovskogo meditsinskogo instituta.
(RETROPERITONEAL SPACE--TUMORS) (HEMATOMA)
(DIAGNOSIS, DIFFERENTIAL)

KOVALEV, S.N.; VERNIK, Ye.B.; GALITSKIY, V.N.; KOGOSOV, L.P.

Making abrasive diamond tools of synthetic diamonds. 'Mashinostroitel'
no.10:7-9 0 '64. (MIRA 17:11)

VERNIK, Ye.M.

Fractional erythrocyte sedimentation reaction during rheumatic fever and tonsillogenic intoxication in children. Vop. okh.mat. (MIRA 16:7)
1 det. 8 no.2:88 F'63.

1. Iz kliniki detskikh bolezney Khabarovskogo 88 meditsinskogo instituta.

(NO SUBJECT HEADINGS)

SOBOL, R.P., kand.tekhn.nauk; VERNIK, Ye.S., inzh.

New construction materials for use in thermal power engineering.
Energ. stroi. no.42:31-38 '64. (MIL 12 3)

VERNIK, Ya.Ye., mladshiy nauchnyy sotrudnik.

Device for marking the tops of cans. Ref.nauch.rab.VNIIEP no.2:
72-75 '54. (MIRA 9:4)

(Marking devices)

15698-63

EWI (K)/EWI'q, EWT m. ABC AFPT/ASD PF-L JD/HW

ACCESSION NR: AP 1000826

10286/62/000/000/0000/0000

AUTHOR: Vernik, Yu. A.

TITLE: Device for feeding and rotating pipes. Class B 21b. 7a. 27 sub 01, No. 152639

SOURCE: byul. izobreteniy i tovarnykh znakov, no. 2, 1963, 7

TOPIC TAGS: pipe rolling, feed device, turning device

ABSTRACT: Device for feeding and rotating pipes during rolling. The device consists of a tapered sleeve with self-chucking device and a drive mechanism made in the form of a reduction gear with a central opening for the passage of the pipe and capable of moving together with the tube during the rolling process. Orig. art. has: 1 figure (see Enclosure 1)

[Abstracter's note; complete translation]

ASSOCIATION: none

SUBMITTED: 06Sept61

DATE ACQ: 28May63

ENCL: 01

SUB CODE: ML

NO. REF SOV: 000

OTHER: 000

Card 1/21

VERNIKOV, G.

Our experience in employing the sick. Okh. truda i sots. strakh.
no.6:37-39 Je '59. (MIRA 12:10)

1. Nachal'nik mediko-sanitarnoy chasti zavoda "Zapovozhstal'" i
"Dneprostal'".
(Handicapped--Employment)

SHEVAKIN, Yu.F.; VERNIK, Yu.A.; SEYDALIYEV, F.S.

Specific pressure during cold transverse plug rolling of tubes.
Izv. vys. ucheb. zav.; chern. met. 8 no.1:71-77 '65
(MIFA 18:1)

1. Moskovskiy institut stali i splavov.

VERNIKOV, I. Kh.

O poluuporyadochennykh kol'tsakh. DAN, 30 (1941), 778-780.

SO: Mathematics in the USSR, 1917-1947
edited by Kurosh, A.G.,
Markushevich, A.I.,
Rashevskiy, P.K.
Moscow-Leningrad, 1948

PA 17/49T28

VERNIKOV, I. S.

Sep 48

USSR/Engineering
Tractors, Wheeled
Tractors

"Relative Merits of the Wheel and Endless Track
Equipped Tractors for Agricultural Use," I. S.
Vernikov, Cand Tech Sci, UNIM, 1 p

"Avto Prom" No 9

Reports traction trials of USSR SKhTZ-NATI and SKhTZ
and US Farmall A and Oliver Row Crop NS tractors.
Tabulates and discusses results.

17/49T28

FDB